Louisiana Department of Environmental Quality (LDEQ) Office of Environmental Services

STATEMENT OF BASIS

Valero Logistics Operations, L.P.
St. James Terminal
St. James, St. James Parish, Louisiana
Agency Interest Number: 36538
Activity Number: PER20060003
Proposed Permit Number: 2560-00013-V4

I. APPLICANT

Company:

Valero Logistics Operations, L.P. P.O. Box 691470 San Antonio, TX 78269

Facility:

St. James Terminal
7167 Koch Rd
St. James, St. James-Parish, Louisiana
Approximate UTM coordinates are 707.50 kilometers East and 3323.5 kilometers
North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS

Crude oil is delivered to the St. James facility by barges, ships, pipelines, and trucks where it is stored until it is shipped out by barges, ships, and pipelines.

St. James Terminal is a designated Part 70 source. The St. James Terminal currently operates under Permit No. 2560-00013-V3, issued July 31, 2006.

III. PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit application and Emission Inventory Questionnaire were submitted by Valero Logistics Operations LP on December 1, 2006 requesting a Part 70 operating permit. Additional information dated December 22, 2006 was also received.

Project

Valero proposes to add 12 tanks to the facility and to add a vapor recovery unit to Marine Loading of Petroleum Product (ML-1). The emissions from the new tanks will be capped under VOC Tanks Emissions Cap No. 2 (VOCTK-CAP 2). Additionally, emissions from VOC Tank Emissions Cap No. 1 (VOCTK-CAP 1) will be increased to include emissions associated with Tank 25, which was added with the previous modification, and to update the emissions calculation method to the latest version of EPA's TANKS program. The emissions from Pipeline and Fittings Fugitives (FUG) will also be increased as associated with the new construction. Valero is also requesting the removal of the emissions cap on Marine Loading (ML-CAP). This emissions cap is no longer necessary with the installation of the vapor recovery unit which is used to control and reduce emissions from ML-1. All toxics will remain capped at less than 9.5 tpy each and less than 23.75 tpy total.

Proposed Permit

Permit 2560-00013-V4 will be a modification of Part 70 operating permit 2560-00013-V3 for the St. James Terminal.

Permitted Air Emissions

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM_{10}	10.71	11.68	+0.97
SO_2	0.34	7.81	+7.47
NO_X	17.63	37.21	+19.58
CO	12.40	38.50	+26.10
VOC	272.86	256.17	-16.69

IV. REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

Applicability and Exemptions of Selected Subject Items

ID No.	Requirement	Note
Plant-wide	Emission Standards for Sulfur Dioxide Continuous Emissions Monitoring [LAC 33:III.1511.A] Emission Standards for Sulfur Dioxide Recordkeeping and Reporting [LAC 33:III.1513]	EXEMPT. Units emit less than 250 tons of SO ₂ per year. Recordkeeping required to demonstrate exemption.
	Comprehensive Toxic Air Pollutant Emission Control Program [LAC 33:III.Chapter 51]	DOES NOT APPLY. Facility is a minor source of toxic air pollutants.
	Chemical Accident Prevention and Minimization of Consequences [LAC 33:III.Chapter 59]	DOES NOT APPLY. No chemicals exceed threshold quantities.
	Chemical Accident Prevention Provisions [40 CFR 68]	DOES NOT APPLY. No chemicals exceed threshold quantities.
	NESHAP Subpart EEEE- Standards for Organic Liquid Distribution [40 CFR Part 63.2330]	DOES NOT APPLY. Facility is not a major source of hazardous air pollutants.
EQTS 3, 10-12, 16-17, and 21-22	NSPS Subpart Ka – Standards of Performance for Storage Vessels for Petroleum liquids for Which Construction, Reconstruction, or Modification Commences after May 18, 1978 and Prior to July 23, 1984. [40 CFR 60.110a]	DOES NOT APPLY. Tanks constructed before May 1978.
Tank 1, 2, 3, 4, 5, 6, 7 and 13	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	EXEMPT. Tanks constructed before May 1978.
EQT 8 Marine	Marine Vapor Recovery	DOES NOT APPLY. VOC
Loading 1	[LAC 33:III.2108] Marine Vapor Recovery [LAC 33:III.2108]	emissions less than 100 tpy DOES NOT APPLY. VOC emissions less than 100 tpy
EQT 9 Marine Loading 2	NESHAP Subpart Y- Standards for Marine Tank Vessel Loading Operations [40 CFR 63.560]	DOES NOT APPLY. Vapor pressures less than 1.5 psia.

ID No.	Requirement	Note
EQT 13 Tank 25	NSPS Subpart K – Standards of Performance for Storage Vessels for Which Construction, Reconstruction, or Modification Commences after June 11, 1973 and Prior to May 19, 1978. [40 CFR 60.110]	DOES NOT APPLY. Tank reconstructed after July 1984.
	NSPS Subpart Ka – Standards of Performance for Storage Vessels for Petroleum liquids for Which Construction, Reconstruction, or Modification Commences after May 18, 1978 and Prior to July 23, 1984. [40 CFR 60.110a]	DOES NOT APPLY. Tank reconstructed after July 1984.
EQT 14 Tank 26	Storage of Volatile Organic Compounds [LAC 33:III.2103.B]	DOES NOT APPLY. Vapor pressures less than 1.5 psia.
	NSPS Subpart Ka – Standards of Performance for Storage Vessels for Petroleum liquids for Which Construction, Reconstruction, or Modification Commences after May 18, 1978 and Prior to July 23, 1984. [40 CFR 60.110a]	DOES NOT APPLY. Tank constructed before May 1978.
	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	EXEMPT. Tank constructed before May 1978.
EQT 15 Tank 27	NSPS Subpart K – Standards of Performance for Storage Vessels for Which Construction, Reconstruction, or Modification Commences after June 11, 1973 and Prior to May 19, 1978. [40 CFR 60.110]	DOES NOT APPLY. Tank reconstructed 1983.
	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	EXEMPT. Tank reconstructed before 1984.
EQTS 18 -20 Tanks 413, 430,and 463	NSPS Subpart K – Standards of Performance for Storage Vessels for Which Construction, Reconstruction, or Modification Commences after June 11, 1973 and Prior to May 19, 1978. [40 CFR 60.110]	DOES NOT APPLY. Tanks constructed prior to June 1973.
	NSPS Subpart Ka – Standards of Performance for Storage Vessels for Petroleum liquids for Which Construction, Reconstruction, or Modification Commences after May 18, 1978 and Prior to July 23, 1984. [40 CFR 60.110a]	DOES NOT APPLY. Tanks constructed prior to June 1973.

Valero Logistics Operations, LP St. James Terminal St. James, St. James Parish, Louisiana

Agency Interest Number: 36538

ID No.	Requirement	Note
EQTS 18 -20 Tanks 413, 430,and 463	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	EXEMPT. Tanks constructed prior to June 1973.
	Storage of Volatile Organic Compounds [LAC 33:III.2103.B]	DOES NOT APPLY. Vapor pressure less than 1.5 psia.
EQT 23 and 26- 28 Tanks 8 and 2501- 2503	NSPS Subpart K – Standards of Performance for Storage Vessels for Which Construction, Reconstruction, or Modification Commences after June 11, 1973 and Prior to May 19, 1978. [40 CFR 60.110]	DOES NOT APPLY. Tank constructed or reconstructed after 1978.
	NSPS Subpart Ka – Standards of Performance for Storage Vessels for Petroleum liquids for Which Construction, Reconstruction, or Modification Commences after May 18, 1978 and Prior to July 23, 1984. [40 CFR 60.110a]	DOES NOT APPLY. Tank constructed or reconstructed after 1978.
EQTS 29-37	NSPS Subpart K – Standards of Performance for Storage Vessels for Which Construction, Reconstruction, or Modification Commences after June 11, 1973 and Prior to May 19, 1978. [40 CFR 60.110]	DOES NOT APPLY. Tanks constructed after 2006.
Tanks 3001-3007 and 5001-5002	NSPS Subpart Ka – Standards of Performance for Storage Vessels for Petroleum liquids for Which Construction, Reconstruction, or Modification Commences after May 18, 1978 and Prior to July 23, 1984. [40 CFR 60.110a]	DOES NOT APPLY. Tanks constructed after 2006.

Prevention of Significant Deterioration/Nonattainment Review

The facility and the changes proposed do not constitute an increase that would meet the definition of Major Modification; therefore, PSD does not apply.

This application permit was reviewed for compliance with 40 CFR 70 and the Louisiana Air Quality Regulations. Prevention of Significant Deterioration (PSD) does not apply. New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) do apply.

MACT Requirements

The terminal is not a major source of TAPs and is therefore not subject to MACT under LAC 33:III.5109.A.

Air Quality Analysis

Impact on air quality from the emissions of the facility is below the National Ambient Air Quality Standards (NAAQS) and the Louisiana Ambient Air Standards (AAS) beyond industrial property.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

V. PERMIT SHIELD

A permit shield is not a component of the draft permit.

VI. PERIODIC MONITORING

Monitoring of Marine Loading VOCs is required to ensure that emissions comply with the limit taken to avoid applicability of LAC 33:III.2108. Monitoring of facility-wide HAPs is required in order to ensure that emissions comply with limits taken to avoid applicability of NESHAP EEEE regulations. Also monitoring of VOC emissions from all tanks is required to ensure compliance with the limit taken to allow flexibility in tank operations.

VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H_2S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_X) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH_4) , Ethane (C_2H_6) , Carbon Disulfide (CS_2)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: \geq 10 tons per year of any toxic air pollutant; \geq 25 tons of total toxic air pollutants; and \geq 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀ – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO_2) – An oxide of sulfur.

Sulfuric Acid (H_2SO_4) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.